

Application No. 10/766,765

RBUS 1310-1
(RA310.P.US)Amendments to the Specification:

Please replace paragraph [0066] with the following amended paragraph:

[0066] Fig. 8 shows the example from Fig. 4, and also includes the steps needed to perform a timing calibration update. The circuit blocks affected by each step are labeled with the step number. Note that only steps (Block 802), (Block 807), and (Block 808) are different relative to the steps in Fig. 6.

(Step 801) Suspend normal transmit and receive operations, by completing transactions in progress and preventing new ones from beginning, or by interrupting transactions that are in progress.

(Step 802) Change the sample point of the receive component from the "RX" operation value (used for normal operations) to either the "RXA" or "RXB" edge value (used for calibration operations) in the "adjust" block. The "RX" operation value may be a simple average of "RXA" and "RXB," i.e. a center value, or it may be another function of "RXA" and "RXB," such as a weighted average. It may be necessary to impose a settling delay at this step to allow the new sample point to become stable.

(Step 803) Change "mux" block of the transmit component so that the "pattern" block input is enabled.

(Step 804) A pattern set is created in the "pattern" block of the transmit component and is transmitted onto the "link" using the TXA or TXB drive point.

(Step 805) The pattern set is received in the receive component. Note that the transmit point of the transmitter is fixed relative to the reference clock of the system.

(Step 806) The received pattern set is compared in the "compare" block to the expected pattern set produced by the "pattern" block in the receive component. The two pattern sets will either match or not match. As a result of this comparison (and possibly other previous comparisons) a pass or fail determination will be made.

(Step 807) Adjust either the "RXA" or "RXB" edge value in the receive component as a result of the pass or fail determination. The "RX" operation value in the transmit component is also adjusted. This adjustment may only be made after two or more of these calibration sequences have been executed, in order to ensure some level of repeatability.

(Step 808) Change the sample point of the receiver from the "RXA" or "RXB" edge value (used

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for calibration operations) to "RX" operation value (used for normal operations) in the "adjust" block of the receive component. It may be necessary to impose a settling delay at this step to allow the new sample point to become stable.

(Step 809) Change "mux" block of the transmit component so that the "normal path" input is enabled.

(Step 810) Resume normal transmit and receive operations.